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| APPLICATION NO.        | FII  | LING DATE .  | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|------------------------|------|--------------|----------------------|---------------------|------------------|
| 10/814,704             | 0    | 3/30/2004    | Hiroharu Sakai       | 16869N-112400US     | 7216             |
| 20350                  | 7590 | 12/07/2006   |                      | EXAMINER            |                  |
|                        |      | TOWNSEND AND | GUPTA, F             | GUPTA, PARUL H      |                  |
| TWO EMBA<br>EIGHTH FLO |      | O CENTER     | •                    | ART UNIT            | PAPER NUMBER     |
|                        |      | A 94111-3834 | 2627                 |                     |                  |

DATE MAILED: 12/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|  | Application No.   | Applicant(s)   |             |  |  |  |  |
|--|---|--|-------------|--|--|--|--|
| _  | 10/814,704  | SAKAI ET AL.   |             |  |  |  |  |
| Office Action Summary  | Examiner  | Art Unit   |             |  |  |  |  |
|  | Parul Gupta .   | 2627   |             |  |  |  |  |
| The MAILING DATE of this communication app<br>Period for Reply   | ears on the cover sheet with the c  | orrespondence ad   | Idress      |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 16(a). In no event, however, may a reply be tim will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | <b>I.</b> nely filed the mailing date of this c D (35 U.S.C. § 133). |             |  |  |  |  |
| Status   |   |  |             |  |  |  |  |
| 1) Responsive to communication(s) filed on 3/30/   | 04.   | •  |             |  |  |  |  |
| ·— ·   | action is non-final.  | •  | •           |  |  |  |  |
| ,  |   | secution as to the   | e merits is |  |  |  |  |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.   |   |  |             |  |  |  |  |
| Disposition of Claims  |   |  |             |  |  |  |  |
| •  |   |  |             |  |  |  |  |
| •  | 4) Claim(s) 1-7 is/are pending in the application.  |  |             |  |  |  |  |
| 4a) Of the above claim(s) is/are withdrawn from consideration.   |   |  |             |  |  |  |  |
| 5) Claim(s) is/are allowed.  |   |  |             |  |  |  |  |
| 6) Claim(s) 1-3 is/are rejected.   |   |  |             |  |  |  |  |
| 7) Claim(s) <u>4-7</u> is/are objected to.   |   |  |             |  |  |  |  |
| 8) Claim(s) are subject to restriction and/or  | r election requirement.   |  |             |  |  |  |  |
| Application Papers   |   |  |             |  |  |  |  |
| 9) The specification is objected to by the Examine   | r. ·  |  |             |  |  |  |  |
| 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.   |   |  |             |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  |   |  |             |  |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).   |   |  |             |  |  |  |  |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.   |   |  |             |  |  |  |  |
| Priority under 35 U.S.C. § 119   |   |  |             |  |  |  |  |
| 12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a)⊠ All b)□ Some * c)□ None of:  |   |  |             |  |  |  |  |
| 1. ☐ Certified copies of the priority documents  | s have been received  |  |             |  |  |  |  |
| 2. ☐ Certified copies of the priority documents  |   | on No  |             |  |  |  |  |
| 3. Copies of the certified copies of the prior   |   |  | Stane       |  |  |  |  |
|  |   | ca in this reational   | Olago       |  |  |  |  |
| application from the International Bureau  |   | ad .   |             |  |  |  |  |
| * See the attached detailed Office action for a list of the certified copies not received.   |   |  |             |  |  |  |  |
|  |   |  | •           |  |  |  |  |
| Attachment(s)  |   |  |             |  |  |  |  |
| 1) Notice of References Cited (PTO-892)  | 4) Interview Summary  | (PTO-413)  |             |  |  |  |  |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  | Paper No(s)/Mail D  | ate  |             |  |  |  |  |
| 3) Information Disclosure Statement(s) (PTO/SB/08)   | 5) Notice of Informal F 6) Other:   | atent Application  |             |  |  |  |  |
| Paper No(s)/Mail Date  | ٠ <u>٠ </u>   |  |             |  |  |  |  |

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### **DETAILED ACTION**

1. Claims 1-7 are pending for examination as interpreted by the examiner. The IDS filed on 03/30/2004, 02/21/2006, and 06/26/2006 were considered.

#### Specification

2. The abstract of the disclosure is objected to because it is longer than a single paragraph consisting of 150 words or less. Correction is required. See MPEP § 608.01(b).

### Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1 and 3 recite the limitation "by computation" in the second paragraph.

The language is vague and indefinite.

#### Claim Rejections - 35 USC § 102

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claim 2 is rejected under 35 U.S.C. 102(b) as being anticipated by Jacobs et al., US Patent 5,802,032.

Regarding claim 2, Jacobs et al. discloses a write power control method of an optical disk drive, said method comprising the steps of: obtaining disk position information of an optical pickup at the time of writing (column 8, lines 44-51); with reference to the obtained disk position information and stored optimum write power information associated with a disk radial position, setting optimum write power at a

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writing position of an optical disk; and controlling laser power of the optical pickup so as to become the set optimum write power (column 7, lines 35-64).

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jacobs et al., in view of Nagasawa et al., US Patent 6,016,297.

Regarding claim 1, Jacobs et al. discloses a write power control method of an optical disk drive, said method comprising the steps of: determining optimum write power associated with radial positions over the whole writing area of the disk by computation (column 8, lines 5-16); adopting the determined result as optimum write power information associated with the radial positions of the disk (column 8, lines 5-16). Jacobs et al. does not but Nagasawa et al. obtaining the push-pull signal amplitude (purpose is served by the signal determining the linear velocity of the light spot) at at least two measuring positions in a radial direction of an optical disk before writing (column 6, lines 27-31); on the basis of the obtained push-pull signal amplitude, adopting the determined result as optimum power information associated with the radial positions of the disk (according to graph shown in figure 7). It would have been obvious to one of ordinary skill in the art at the time of the invention to include the concept of using the amplitude of the push-pull signal at different radial positions to obtain the

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optimum write power as taught by Nagasawa et al. into the system of Jacobs et al. The motivation would be to reduce tracking errors (column 2, lines 30-46).

Regarding claim 3, Jacobs et al. discloses a write power control method of an optical disk drive, said method comprising the steps of: determining optimum write power associated with radial positions over the whole writing area of the disk by computation (column 8, lines 5-16); adopting the determined result as optimum write power information associated with the radial positions of the disk (column 8, lines 5-16), and then storing the optimum write power information (column 8, lines 5-10); obtaining disk position information of an optical pickup at the time of writing (column 8, lines 44-51); with reference to the obtained disk position information and stored optimum write power information associated with the radial position of the disk, setting optimum write power at a writing position of an optical disk; and controlling laser power of the optical pickup so as to become the set optimum write power (column 7, lines 35-64). Jacobs et al. does not but Nagasawa et al. obtaining the push-pull signal amplitude (purpose is served by the signal determining the linear velocity of the light spot) at at least two measuring positions in a radial direction of an optical disk before writing (column 6, lines 27-31); on the basis of the obtained push-pull signal amplitude, adopting the determined result as optimum power information associated with the radial positions of the disk (according to graph shown in figure 7). It would have been obvious to one of ordinary skill in the art at the time of the invention to include the concept of using the amplitude of the push-pull signal at different radial positions to obtain the optimum write power as taught by Nagasawa et al. into the system of Jacobs et al. The motivation would be to reduce tracking errors (column 2, lines 30-46).

## Allowable Subject Matter

6. Claims 4-7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Parul Gupta whose telephone number is 571-272-5260. The examiner can normally be reached on Monday through Thursday, from 9:30 AM to 7 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bill Korzuch can be reached on 571-272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

PHG 12/4/06

WILLIAM KORZUCH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600